AMENDMENT TO THE CLAIMS

Claims 1-15 (Cancelled).

16. (Previously Presented) A method of forming a color imager in a first semiconductor region of a first conductivity type, the method comprising the steps of:

forming a second semiconductor region of a second conductivity type over the first semiconductor region;

forming a layer of isolation material on the second semiconductor region;

forming a layer of metal over the layer of isolation material over the second semiconductor region; and

etching the layer of metal to form a plurality of openings in the layer of metal, the plurality of openings including a first opening that vertically lies over a first pn junction region, a second opening that vertically lies over a second pn junction region, and a third opening that vertically lies over a third pn junction region, the layer of metal being electrically isolated from the first and second semiconductor regions.

17. (Original) The method of claim 16 wherein the first, second, and third openings have different widths.

18. (Previously Presented) A method of forming a color imager in a first semiconductor region of a first conductivity type, the method comprising the steps of:

forming a second semiconductor region of a second conductivity type over the first semiconductor region;

forming a layer of metal over the second semiconductor region; and

etching the layer of metal to form a plurality of openings in the layer of metal, the plurality of openings including a first opening that vertically lies over a first pn junction, a second opening that vertically lies over a second pn junction, and a third opening that vertically lies over a third pn junction, the first opening having a first width approximately equal to a first wavelength of light, the second opening having a second width approximately equal to a second wavelength of light, and the third opening having a third width approximately equal to a third wavelength of light, the first, second, and third widths being different.

19. (Original) The method of claim 18 wherein the first wavelength of light is red light, the second wavelength of light is green light, and the third wavelength of light is blue light.

20. (Previously Presented) The method of claim 16 and further including the step of forming an insulation region in the second semiconductor region, the insulation region laterally isolating the first pn junction from the second pn junction.

21. (Previously Presented) The method of claim 16 wherein:

the second semiconductor region has a top surface; and

the first pn junction, the second pn junction, and the third pn junction lie at substantially equal distances below the top surface of the second semiconductor region.

22. (Previously Presented) The method of claim 16 wherein:

the second semiconductor region has a top surface; and

the first pn junction, the second pn junction, and the third pn junction lie at substantially different distances below the top surface of the second semiconductor region.

23. (Previously Presented) The method of claim 16 wherein the step of forming the second semiconductor region includes the steps of:

forming a mask over the first semiconductor region; and

implanting the first semiconductor region with a dopant to form the second semiconductor region.

24. (Previously Presented) The method of claim 23 and further comprising the step of repeating the forming a mask and implanting steps a plurality of times to form the second semiconductor region.

25. (Previously Presented) The method of claim 18 and further including the step of forming an insulation region in the second semiconductor region, the insulation region laterally isolating the first pn junction from the second pn junction.

26. (Previously Presented) The method of claim 18 wherein:

the second semiconductor region has a top surface; and

the first pn junction, the second pn junction, and the third pn junction lie at substantially equal distances below the top surface of the second semiconductor region.

27. (Previously Presented) The method of claim 18 wherein:

the second semiconductor region has a top surface; and

the first pn junction, the second pn junction, and the third pn junction lie at substantially different distances below the top surface of the second semiconductor region.

28. (Previously Presented) The method of claim 18 wherein the step of forming the second semiconductor region includes the steps of:

forming a mask over the first semiconductor region; and

implanting the first semiconductor region with a dopant to form the second semiconductor region.

29. (Previously Presented) The method of claim 28 and further comprising the step of repeating the forming a mask and implanting steps a plurality of times to form the second semiconductor region.

30. (Currently Amended) A method of forming a color imager in a first semiconductor region of a first conductivity type, the method comprising the steps of:

forming a plurality of second semiconductor regions of a second conductivity type over the first semiconductor region, the plurality of second semiconductor regions having a plurality of pn junctions that lie between the plurality of second semiconductor regions and the first semiconductor region, each second semiconductor region having a top surface;

forming a layer of insulation material that contacts the second semiconductor regions;

forming a layer of metal over the layer of insulation material; and

etching the layer of metal to form a plurality of spaced-apart openings of different widths in the layer of metal, ~~and~~ the openings lying over the plurality of second semiconductor regions, the layer of metal lying between two adjacent

openings being electrically isolated from the second semiconductor regions that lie below the two adjacent openings.

31. (Previously Presented) The method of claim 30 and further comprising the step of forming an insulation region in the second semiconductor region, the insulation region laterally isolating the plurality of second semiconductor regions.

32. (Previously Presented) The method of claim 30 wherein the plurality of pn junctions lie at substantially equal distances below the top surfaces of the second semiconductor regions.

33. (Previously Presented) The method of claim 30 wherein the plurality of pn junctions lie at substantially different distances below the top surfaces of the second semiconductor regions.

34. (Previously Presented) The method of claim 30 wherein the step of forming the second semiconductor region includes the steps of:

forming a mask over the first semiconductor region; and

implanting the first semiconductor region with a dopant to form a second semiconductor region.

35. (Previously Presented) The method of claim 30 wherein the plurality of openings includes a first opening that has a first width approximately equal to a first wavelength of light, a second opening that has a second width approximately equal to a second wavelength of light, and a third opening that has a third width approximately equal to a third wavelength of light, the first, second, and third widths being different.